

8 surface coating; said first and second waveguides at an acute angle to each  
9 other;

10 third and forth waveguides made of a dielectric material, said third and  
11 fourth wave guides having first ends extending into said first ends of said first  
12 and second wave guides and second ends extending outward from said first  
13 ends of said first and second wave guides;

14 first means coupled to said second end of said first waveguide for  
15 delivering electromagnetic energy to said first wave guide and to said third  
16 waveguide for transmission to the assembly ; and

17 second means coupled to said second end of said second waveguide  
18 for receiving electromagnetic energy transmitted by said first means to the  
19 assembly and reflected back to said fourth waveguide.

1 2. (Original) The device as set forth in claim 1 comprising:

2 said third and fourth wave guides having top and bottom surfaces and  
3 first and second side surfaces, a portion of said firsts end of said third and  
4 fourth wave guides tapered along the top and bottom surfaces to and edge,  
5 and a portion of said second ends of said third and fourth wave guides tapered  
6 along there first and second side surfaces to and edge.

1 3. (Original) The device as set forth in claim 2 comprising said third and  
2 fourth waveguides are made of solid pieces of dielectric material.

1 4. (Original) The device as set forth in claim 3 comprising said acute angle  
2 is generally ten degrees.

1 5. (Original) The device as set forth in claim 4 comprising said third and  
2 fourth waveguides are made of Polytetrafluoroethylene.

1       6. (Original) A device for inspecting an assembly including a surface coating  
2       containing magnetic radar absorbing materials on a conductive surface, the  
3       device comprising:  
4              a first means for transmitting an electromagnetic signal to the assembly,  
5       said first means comprising:  
6                  a electromagnetic signal generating means; and  
7                  a first waveguide made of metal having first and second ends,  
8       said first waveguide for receiving the electromagnetic signal at said first  
9       end and transmitting the electromagnetic signal toward said second  
10      end;  
11              a first waveguide made of a dielectric material, said second  
12      waveguide having a first end extending into said second end of said  
13      first waveguide and a second end extending outward from said second  
14      end of said first wave guide; and  
15              a second means for receiving the electromagnetic signal reflected back  
16      from the assembly, said second means comprising:  
17                  a electromagnetic signal receiving means; and  
18                  a third waveguide made of metal having first and second ends,  
19       said third wave guide for receiving the electromagnetic signal at said  
20       second end transmitting the electromagnetic signal toward said first  
21      end; and  
22              a fourth waveguide made of a dielectric material, said fourth  
23      waveguide having a first end extending into said second end of said third  
24      waveguide and a second end extending outward from said second end of  
25      said first wave guide for receiving electromagnetic radiation reflected from  
26      the assembly.

1    7. (Original) The device as set forth in claim 6 comprising:  
2        said second and fourth waveguides having top and bottom surfaces  
3        and first and second side surfaces, a portion of said first end of said third and  
4        fourth wave guides tapered along the top and bottom surfaces to and edge,  
5        and a portion of said second ends of said third and fourth wave guides tapered  
6        along there first and second side surfaces to and edge.

1    8. (Amended) The device as set forth in claim [8] 7 comprising said second and  
2        fourth waveguides are made of solid pieces of dielectric material.

1    9. (Amended) The device as set forth in claim [9] 8 comprising;  
2        said first and second waveguide having longitudinal axis, said  
3        longitudinal axis of said first and second wave guides aligned with each other;  
4        and  
5        said third and fourth waveguides having longitudinal axis, said  
6        longitudinal axis of said third and fourth wave guides aligned with each other.

1    10. (Original) The device as set forth in claim 9 wherein said longitudinal axis  
2        of said first and second waveguides are at an acute angle to said longitudinal  
3        axis of said third and fourth waveguides.

1    11. (Original) The device as set forth in claim 10 wherein said acute angle is  
2        ten degrees.

1    12. (Original) The device as set forth in claim 11 comprising said third and  
2        fourth waveguides are made of Polytetrafluoroethylene.

1       13. (Original) A device for inspecting an assembly including a surface coating  
2       containing magnetic radar absorbing materials on a conductive surface, the  
3       device comprising:

4            a first means for transmitting an electromagnetic signal to the assembly,  
5       said first means including a first waveguide made of a conductive material  
6       coupled in series to a second waveguide made of a dielectric material; and

7            a second means for receiving the portion of the electromagnetic signal  
8       reflected from the assembly, said second means including a third waveguide  
9       made of a conductive material coupled in series to a fourth waveguide made  
10      of a dielectric material;

11          such that electromagnetic signal is transmitted from said first  
12       waveguide to said second waveguide on to the assembly and the portion of  
13       the electromagnetic signal reflected off the assembly is received by said  
14       fourth waveguide and transmitted to said third waveguide.

1       14. (Original) The device as set forth in claim 13 comprising:

2            said second and fourth waveguides having top and bottom surfaces  
3       and first and second side surfaces, a portion of said firsts end of said third and  
4       fourth waveguides tapered along the top and bottom surfaces to and edge,  
5       and a portion of said second ends of said third and fourth waveguides tapered  
6       along there first and second side surfaces to and edge.

1       15. (Original) The device as set forth in claim 14 comprising said second and  
2       fourth waveguides are made of solid pieces of dielectric material.

1       16. (Original) The device as set forth in claim 15 comprising;  
2                said first and second waveguide having longitudinal axis, said  
3       longitudinal axis of said first and second waveguides aligned with each other;  
4       and

5                said third and fourth waveguides having longitudinal axis, said  
6       longitudinal axis of said third and fourth wave guides aligned with each other.

1       17. (Original) The device as set forth in claim 16 wherein said longitudinal  
2       axis of said first and second waves guides are at an acute angle to said  
3       longitudinal axis of said third and fourth waveguides.

1       18. The device as set forth in claim 17 wherein said acute angle is ten  
2       degrees.

1       19. The device as set forth in claim 18 comprising said third and fourth  
2       waveguides are made of Polytetrafluoroethylene.

## REMARKS

The Examiner stated that the Application was in condition for allowance except for typographical errors on page 1, line 17 (paragraph 002) and errors in the dependency of Claims 8 and 9. By this amendment, these corrections have been made. Copies of the paragraph 002 with the correction indicated by brackets and underlines is provided in Attachment 1.

Therefore the Application is now in condition for allowance and the issuance of the Notice of Allowance is respectfully requested.



Louis Dachs

Reg. No.: 26,858

Attorney for Applicant/Assignee